

Nan Basen – Sous Dlo Catchment System in Kay Rond Haiti

This catchment system is made possible by a grant from One Family International and the Winkley family. The purpose of a catchment system is to protect and secure a natural spring. Sous Dlo water source is the primary water source for 50 to 100 families living on this mountain and also serves people travelling to Jeremie on a road close by.

Catchment systems for natural springs are very beneficial in order to maintain the integrity and the purity of these water sources.

1. A catchment system begins with building a containment structure – usually out of cinder blocks and concrete – that completely encloses the source. The water is then directed either through an opening that reduces any contamination possibility or a piece of pipe that directs the primary flow to an area where people can collect their drinking water.

2. A barrier wall is built in a rectangular or horseshoe design around the back of the source and extending fifty feet or so on either side of the source to prevent rain fall from eroding or contaminating the area.

3. Directional canals made of concrete about two feet high by two feet deep are then built to channel water into several areas to be used to wash clothes, bath, and water animals.

4. The area is then filled with gravel and rock in order to improve drainage and usability of the source.

5. Finally, the area is excavated and landscaped so that the excess water is drained and pooling is prevented to reduce mosquito borne diseases.

6. Catchment systems are particularly effective in preventing the transmission of cholera.

The wonderful blessing of a natural spring is in most cases the water is pristine and pure when it comes out of the mountain or rock formation. No filtering is necessary. A catchment system is a custom built bulwark system designed to protect the integrity of that natural source and maximize its benefit. Unless a catchment system is developed, the source can become contaminated soon after exiting from the rock. Since there is always a positive outward flow however, the contamination is rapidly moved down stream. If nothing is done to the exiting water, it can pool and stagnate and be a breeding ground for mosquitoes and a haven for disease development. With the advent of Cholera, it has become much more urgent to develop and protect as many natural springs as possible.

The main focal point for a catchment system is that development of a natural spring into a segregated catchment system is a wonderful blessing for a community. These springs are used by the local people wherever they occur but unless they are developed, much of the above explanation can and does occur. Once designed and developed (HMI always uses Haitian engineers and architects who are familiar with Haitian law and policy) the spring becomes a safe and effective source of potable water for a very long time. No pump or filtering is necessary. Spending on development of these springs in the opinion of HMI is one of the most efficient uses of resources for production and protection of potable water.

This system was completed in February, 2012. The community is overjoyed to have such a beautiful and safe source of water. Because of the water now being directed to a natural waterfall, there is no longer any pooling of water so the possibility of waterborne bacteria breeding in the area is much reduced. The community can now wash clothes and bathe in the designated area without being in stagnant or contaminated water.

Thanks OFI for helping make the improvement of this source possible!

Development of Water source – September 2011



Water source in its natural, unprotected state.



